



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,374	10/20/2003	Lee Doyle Whetsel	TI-14124D.4	2851

23494 7590 04/21/2005

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

BRITT, CYNTHIA H

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,374	WHETSEL, LEE DOYLE	
	Examiner	Art Unit	
	Cynthia Britt	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-63 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 25-63 is/are rejected.
- 7) ☒ Claim(s) 57 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>4/15/05</u> . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/20/03</u> . | 6) <input type="checkbox"/> Other: ____. |

Handwritten marks: "ile" in the bottom left corner and a stylized signature or mark in the bottom right corner.

DETAILED ACTION

Claims 1-24 are cancelled.

Claims 25-63 are presented for examination.

Information Disclosure Statement

An initialed and dated copy of Applicant's IDS form 1449, A and B, filed October 20, 2003, is attached to the instant Office action.

Drawings

The drawings were received on October 20, 2003. These drawings are acceptable.

Specification

The preliminary amendment submitted on October 20, 2003 which modifies the Title, Specification and the Claims, has been entered prior to examination.

Claim Objections

Claim 57 objected to because of the following informalities: Claim 57 cannot depend on claim 57. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

Art Unit: 2133

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 25-37, 39-51 and 53-63 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 25, of copending Application No. 10/649274. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 25 of application 10/649274 states;

An integrated circuit comprising:

A. a substrate;

B. operating circuits formed on the substrate, the operating circuits including an operating bus of plural leads for carrying normal operating signals;

C. a serial data input lead formed on the substrate, a serial data output lead formed on the substrate, and a plurality of serial scan paths, each formed of scan registers, formed on the substrate and coupled between the serial data input lead and the serial data output lead, the serial scan paths for carrying serial data signals, including command signals, an expected data pattern signal, and a protocol selection signal, on the substrate,

i. one of the plurality of serial scan paths including a data register having plural data storage locations, a serial input coupled between the serial data input lead and the data storage locations for carrying serial data signals to the data storage locations, a serial output coupled between the serial data output lead and the data storage locations for carrying signals out of the data storage locations, data inputs coupled between the data storage locations and the operating bus for carrying the normal operating signals to the data storage locations, and a control input, and

ii. another of the plurality of serial scan paths including a command register, the command register having plural command storage locations for storing command signals, a control input, a serial input coupled between the serial data input lead and the command storage locations for carrying the command signals to the storage locations, and a serial output coupled to the serial data output lead;

D. an expected data memory formed on the substrate, the expected data memory having plural expected data pattern storage locations for storing an expected data pattern signals and having at least one input coupled between one of the serial scan paths and the expected data storage locations for receiving the expected data pattern signals from the serial scan path;

E. a comparator formed on the substrate, the comparator having first inputs coupled to the operating bus and second inputs coupled to the expected data memory

for comparing at least some of the normal operating signals to corresponding ones of the expected data pattern signals, the comparator having a compare output lead;

F. a mode select input lead formed on the substrate, the mode select input lead for carrying a mode select signal;

G. a serial data clock input lead formed on the substrate, the serial data clock input lead for carrying a serial data clock signal;

H. an access port formed on the substrate, the access port including control circuitry and having a plurality of control outputs, at least one first control output coupled to the control input of the command register, at least one second control output coupled to the control input of the data register, a first input coupled to the mode select input lead and a second input coupled to the serial data clock input lead, the control circuitry being operable selectively to control shifting of the serial data signals between the serial data input lead and the serial data output lead, and into and out of the command register, and into and out of the data register responsive to the mode select signal and the serial data clock signal;

J. a protocol selection memory having at least one storage location for storing a protocol selection signal, and an input coupled to one of the serial scan paths, the protocol selection memory storage location for receiving the protocol selection signal from the serial scan path; and

K. an event control circuit including a protocol input coupled to the protocol selection memory, an event input lead coupled to the compare output lead, and an event output lead.

Claims 25 and 53 of the instant application recite “functional circuits” where the copending Application No. 10/649274 claim 25 recites “operating circuit”.

Claims 26 and 54 of the instant application are claimed in D of the copending Application No. 10/649274 claim 25.

Claims 27, 41, 44 and 55 of the instant application are claimed in J and K of the copending Application No. 10/649274, claim 25. The active or inactive state of the signal would be inherent in a scanned signal.

Claims 28, 42, and 56 of the instant application are claimed in E and K of the copending Application No. 10/649274 claim 25.

Claims 29, 32, 43, 46, and 57 of the instant application is not claimed in copending Application No. 10/649274, however it would be obvious to a person having ordinary skill in the art at the time this invention was made to incorporate an event signal from an external tester into the claimed circuit.

Claim 30 and 58 of the instant application is claimed in the copending Application No. 10/649274, claim 42 (indirectly dependent on claim 25 above).

Claim 31 of the instant application is claimed in K of the copending Application No. 10/649274 claim 25.

Claims 33 and 47 of the instant application are claimed in the copending Application No. 10/649274 claims 36-38. It would also be obvious to a person having ordinary skill in the art at the time this invention was made to have had circuitry to perform plural protocols if there is a protocol selection signal/memory.

Claims 34, 35, 48, and 59 of the instant application is claimed in C *i* of the copending Application No. 10/649274, claim 25.

Claims 36, 45, 50, and 62 of the instant application are claimed in K of the copending Application No. 10/649274, claim 25.

Claims 37, 51, and 60 of the instant application are claimed in C *i* and *ii* of the copending Application No. 10/649274.

Claim 39 of the instant application recites "observation circuits" where the copending Application No. 10/649274 claim 25 recites "operating circuit".

Claim 40 of the instant application is claimed in J of the copending Application No. 10/649274 claim 25.

Claims 49 and 61 of the instant application are claimed in H of the copending Application No. 10/649274 claim 25.

Claim 63 of the instant application is claimed in the copending Application No. 10/649274, claims 35 and 40 (indirectly dependent on claim 25 above).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 38 and 52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4, and 8, 11, and 12 of U.S. Patent No. 5,905,738 (same inventor, same assignee, priority document for the instant application). Although the conflicting claims are not identical,

Art Unit: 2133


they are not patentably distinct from each other because the event qualifier in the patented application would equate to the event control circuit in the instant application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Britt whose telephone number is 571-272-3815. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cynthia Britt
Examiner
Art Unit 2133

ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100